Atlas of Genetics and Cytogenetics in Oncology and Haematology

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Leukaemia Section

Mini Review

dic(1;15)(p11;p11)

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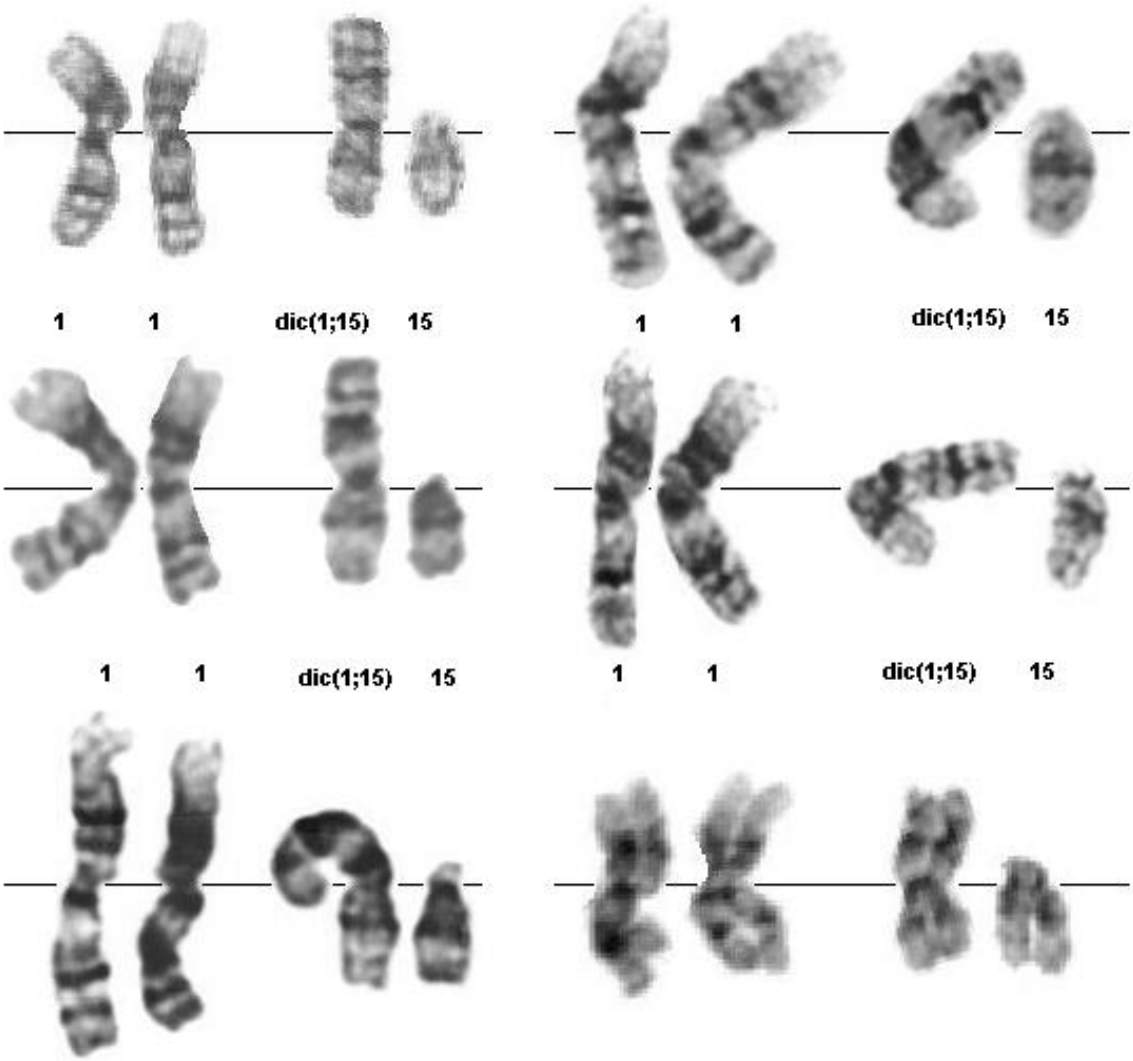
Identity



dic(1;15)(p11;p11) G-banding - Courtesy Catherine Roche-Lestienne, Olivier Theisen, Jean-Luc Lai.

Clinics and pathology

Disease

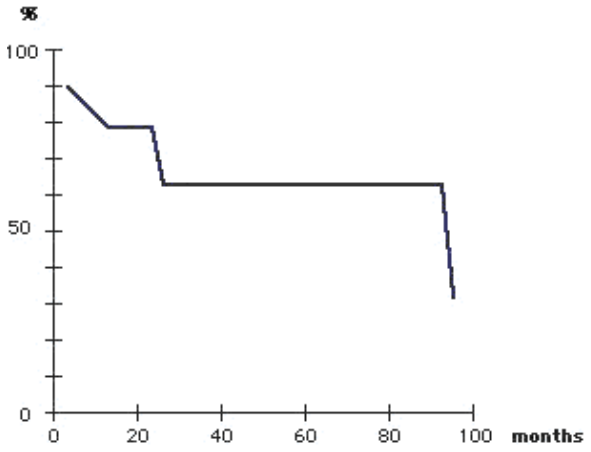
Myeloid malignancies

Phenotype / Stem cell origin

Myeloproliferative diseases (MPD) in 3 of 10 available cases (polycytemia vera (PV) in all 3 cases), myelodysplastic syndromes (MDS) in 6 cases (mainly refractory anaemia (RA): 5 cases; RARS in one case), acute myeloid leukaemia (AML) of M7 type in one case.

Epidemiology

At least 10 cases; balanced sex ratio (5M/5F); median age was 47 years (range 15-81).



Kaplan-Meier on 10 cases of dic(1;15) from the literature; survivals (in months) were: 4, 14, 23+, 24+, 27, 40+, 93+, 96, 235.

Prognosis

About 60% of cases were still alive 2 to 8 years after diagnosis (see figure1), but with a too short follow up of a too small cohort, no real conclusions can be drawn. It is likely that the prognosis depend more on the haematological diagnosis (AML versus MDS, vs MPD).

Cytogenetics

Cytogenetics morphological

Presents as-15, + dic(1;15) in most, if not all, cases. It therefore results in trisomy 1q; sole anomaly in about half cases, accompanied with del(5q) twice, +8 once, del(20q) once.

Genes involved and Proteins

Note: Genes involved are unknown; the translocation breakpoints are likely to be in heterochromatic regions.

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